<u>Abstract</u>

The invention concerns a network element (1) for setting up wireless networks (3), a corresponding network (4) and a method of setting up wireless networks and of wireless data exchange between network elements (1) and/or network users (2), wherein the network element (1) has a transmitting/receiving unit (12) for wirelessly transmitting and receiving data, a control unit (11) for controlling the processing of data and a data memory (15). For improving known concepts for setting up wireless networks the control unit (11) is adapted to evaluate connection path information (22) and connection state information (21) for data exchange between network elements (1) and/or network users (2) in order to determine partial sections of data transmission routes and/or complete data transmission routes for transmitting or forwarding data, wherein the connection path information (22) specifies the number of the network elements (1) and the neighbourhood relationships of the network elements (1) of the network and the connection state information (21) specifies the state of the connection between network elements (1) and/or network users (2).

(Figure 3)